

ELECTROCONDUCTIVE INK PRINTED CIRCUIT ELEMENT

ABSTRACT

Circuit Elements such as capacitors and inductors are formed from electroconductive material printed on a sheet. By printing lines in electroconductive material on both sides of a sheet, a capacitor is generated with the sheet serving as the capacitor's dielectric. If a series of parallel lines is printed at an angle with respect to a sheet and the sheet is subsequently rolled so that one end of each line engages another line to create a coil and the ends of the coil are connected across a current source, an inductor is created. The inductor can be used with another inductor to form a transformer. If two identical inductor sheets are placed one on top of the other and both are rolled to form concentric inductors, the resultant circuit element has both inductance and capacitance properties.

09017461-072704-
T0220-T947660